DOCKET NO.: NNI-0052 PATENT



### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In Re Application of:

Kent Davey Confirmation No.: 4056

Application No.: 09/873,622 Group Art Unit: 2128

Filing Date: June 4, 2001 Examiner: Herng der Day

For: METHOD FOR OPTIMIZING TRANSCRANIAL MAGNETIC

STIMULATION CORES AND MAGNETIC CORES PRODUCED THEREBY

DATE OF DEPOSIT: February 2, 2005

I HEREBY CERTIFY THAT THIS PAPER IS BEING DEPOSITED WITH THE UNITED STATES POSTAL SERVICE AS FIRST CLASS MAIL, POSTAGE PREPAID, ON THE DATE INDICATED ABOVE AND IS ADDRESSED TO THE COMMISSIONER FOR PATENTS, P.O. BOX 1450, ALEXANDRIA, VA 22313-1450.

TYPED NAME: Vincent J. Roccia REGISTRATION NO.: 43,887

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Dear Sir:

#### INFORMATION DISCLOSURE STATEMENT

Pursuant to 37 CFR § 1.56 and in accordance with 37 CFR §§ 1.97-1.98, information relating to the above-identified application is hereby disclosed. Inclusion of information in this statement is not to be construed as an admission that this information is material as that term is defined in 37 CFR § 1.56(b).

In accordance with § 1.97(b), since this Information Disclosure Statement is
being filed either within three months of the filing date of the above-identified
application, within three months of the date of entry into the national stage of

02/09/2005 CCHAU1 00000025 09873622

05/01/5000 comings

180.00 OP

02 FC:1806

DOCKET NO.: NNI-0052 - 2 - PATENT

36 3

the above identified application as set forth in § 1.491, before the mailing date of a first Office Action on the merits of the above-identified application, or before the mailing date of a first Office Action after the filing of request for continued examination under § 1.114, no additional fee is required.  $\boxtimes$ In accordance with § 1.97(c), this Information Disclosure Statement is being filed after the period set forth in § 1.97(b) above but before the mailing date of either a Final Action under § 1.116 or a Notice of Allowance under § 1.311, or before an action that otherwise closes prosecution in the application, therefore: Certification in Accordance with § 1.97(e) is attached; or  $\boxtimes$ The fee of \$180.00 as set forth in § 1.17(p) is attached. П In accordance with § 1.97(d), this Information Disclosure Statement is being filed after the mailing date of either a Final Action under § 1.113 or a Notice of Allowance under § 1.311 but before, or simultaneously with, the payment of the Issue Fee, therefore included are: Certification in Accordance with § 1.97(e); and the submission fee of \$180.00 as set forth in § 1.17(p).  $\boxtimes$ Copies of reference numbers 1 thru 52 listed on the attached Form PTO-1449 are enclosed herewith. Copies of reference numbers on the attached Form PTO 1449 are not required to be submitted pursuant to 37 CFR § 1.98(a)(2)(i). Copies of references are not being submitted because they were previously cited by or submitted to the U.S. Patent and Trademark Office in patent application number , filed for which a claim for priority under 35 U.S.C. § 120 has been made in the instant application.

1 40

**DOCKET NO.: NNI-0052** 

- 3 -

**PATENT** 

There are no listed references which are not in the English language.

Please charge any deficiency or credit any overpayment to Deposit Account No. 23-

3050. This form is submitted in duplicate.

Date: February 2, 2005

Vincent J. Roccia

Registration No. 43,887

WOODCOCK WASHBURN LLP

One Liberty Place - 46th Floor

Philadelphia, PA 19103

Telephone: (215) 568-3100 Facsimile: (215) 568-3439

© 2005 WW



TRADE MARK						
	O-1449 Modified	Docket No. NNI-0052	Application No. <b>09/873,622</b>			
Cited	ent and Publications I by Applicant I sheets if necessary)	Applicant Kent Davey				
	rtment of Commerce d Trademark Office	Filing Date June 4, 2001	Group <b>2128</b>			
		Confirmation No. 4056				
ОТН	ER DOCUMENTS (Includ	ling Author, Title, Date	Pertinent Pages, Etc.)			
		A. Cantano, P. Noel, "Transcranial Magnetic Stimulation: Interest in the Excitation Threshold", Acta Neurologica Belgica, 97, 1997, 61				
	Transactions on Magnet	Davey, K., "Rotating Field Analysis Using Boundary Element Methods", <i>IEEE Transactions on Magnetic</i> , <b>May 1999</b> , 35(3), 1402-1405				
	Transactions on Magnet	Davey, K.R. et al., "Use of Tensor Product Spines in Magnet Optimization", <i>IEEE Transactions on Magnetic</i> , <b>May 1999</b> , 35(3), 1714-1717				
	Transactions on Magnet	Davey, K.R., "Magnet Design Optimization Using Variable Metrics", <i>IEEE Transactions on Magnetic</i> , <b>November 1995</b> , 31(6), 3566-3568				
		G. Cerri, R. Deleo, F. Moglie, A. Schiavoni, "An Accurate 3 -D Model for Magnetic Stimulation of the Brain Cortex", <i>Journal of Medical Engineering and Technology</i> , 19(1), <b>1995</b> , 7-16				
	Magnetic Stimulation of	G.A. Mouchawar, et al., "Guidelines for Energy-Efficient Coil: Coils Designed for Magnetic Stimulation of the Heart", <i>Magnetic Motor Stimulation: Basic Principles and Clinical Experience</i> , EEG Supplement 43, 1991, 255-267				
		John Cadwell, "Optimizing Magnetic Stimulator Design", Magnetic Motor Stimulation: BasicPrincples and Clinical Experience, EEG Supplement 43,1991,				
	the Dexamethasone Sup 53, 33-37	Pridmore, S. md, "Rapid Transcranial Magentic Stimulation and Normalization of the Dexamethasone Suppression Test", <i>Psychiatry and Clinical Neurosciences</i> , <b>1999</b> , 53, 33-37				
		Roth and Basser "A Model of the Stimulation of a Nerve Fiber by Electromagnetic Induction", <i>IEEE Transactions on Biomedical Engineering</i> , 37(6), <b>1990</b> , 588-596.				
1	Department of Engineer	Ruohonen, J., "Transcranial Magnetic Stimulation: Modeling and New Techniques", Department of Engineering Physics and Mathematics, Laboratory of Biomedical				
EXAMINER	Engineering, Helsinki University of Technology, Eshoo, Finland, 1998, 1-50  DATE CONSIDERED					



Form PTO-1449 Modified				Docket No. Application No. NNI-0052 09/873,622		
	Cite	tent and Publications d by Applicant al sheets if necessary		Applicant Kent Davey		
		rtment of Commerce d Trademark Office	•	Filing Date June 4, 2001		
				Confirmation No. 4056		
		U. \$	S. PATENT	T DOCUMENTS		
Examiner Initial		Document No.	Date	Name	Class	Subclass
	11	2003/0130706 A1	07/10/03	Sheffield, et al.	607	46
	12	2002/0103515 A1	08/01/02	Davey, et al.	607	66
	13	2002/0087201 A1	07/04/02	Firlik, et al.	607	45
	14	2001/0031906 A1	10/18/01	Ishikawa, et al.	600	13
	15	4,994,015	02/19/91	Cadwell	600	13
	16	5,078,674	01/07/92	Cadwell	600	13
	17	5,116,304	05/26/92	Cadwell	600	13
	18	6,179,769 B1	01/30/01	Ishikawa, et al.	600	9
	19	6,179,771 B1	01/30/01	Mueller	600	13
	20	6,402,678 B1	06/11/02	Fischell, et al.	600	13
	-	FORE	IGN PATE	ENT DOCUMENTS		
Examiner Initial		Document No.	Date	Country		anslation
initial	21	WO 02/032504 A2	04/25/02	PCT	YES	NO
	22	WO 02/094997 A2	11/28/02	PCT		
	23	WO 02/085449 A2	10/31/02	PCT		
	24	WO 02/09811 A1	02/07/02	PCT		
	25	EP 1 273 320 A1	01/08/03	ЕРО		
EXAMINE	₹			DATE CONSIDER	RED	



Form PTO-1449 Modified	Docket No. NNI-0052	Application No. <b>09/873,622</b>	
List of Patent and Publications Cited by Applicant (Use several sheets if necessary)	Applicant Kent Davey		
U.S. Department of Commerce Patent and Trademark Office	Filing Date June 4, 2001	Group <b>2128</b>	

Confirmation No.

## **U. S. PATENT DOCUMENTS**

4056

Examiner Initial		Document No.	Date	Name	Class	Subclass
	26	2002/0091419 A1	07/11/02	Firlik, et al.	607	45
	27	2003/0004392 A1	01/02/03	Tanner, et al.	600	9
	28	2003/0023159 A1	01/30/03	Tanner	600	417
	29	2003/0028072 A1	02/06/03	Fischell, et al.	600	13
	30	2003/0088274 A1	05/08/03	Gliner, et al.	607	3
	31	2003/0097161 A1	05/22/03	Firlik, et al.	607	72
	32	2003/0195588 A1	10/16/03	Fischell, et al.	670	55
·	33	2003/0204135 A1	10/30/03	Bystritsky	600	407
	34	6,198,958 B1	03/06/01	Ives, et al.	600	411
	35	6,663,556 B2	12/16/03	Barker	600	14

# FOREIGN PATENT DOCUMENTS

Examiner					Translation	
Initial		Document No.	Date	Country	YES	NO
	36	WO 02/089902 A2	11/14/02	PCT		
	37	WO 03/035163 A2	05/01/03	PCT		
	38	WO 02/089902 A2	11/14/02	PCT		
	39	WO 03/035163 A2	05/01/03	PCT		
	40	WO 04/082759 A2	09/30/04	PCT		
EXAMINER				DATE CONSIDERED		



Form PTO-1449 Modified	Docket No. NNI-0052	Application No. <b>09/873,622</b>	
List of Patent and Publications Cited by Applicant (Use several sheets if necessary)	Applicant Kent Davey		
U.S. Department of Commerce Patent and Trademark Office	Filing Date June 4, 2001	Group <b>2128</b>	
•	Confirmation No. 4056		

## **U. S. PATENT DOCUMENTS**

Examiner Initial		Document No.	Date	Name	Class	Subclass
	41	2003/0050527 A1	03/13/03	Fox, et al.	600	13
	42	2003/0125786 A1	07/03/03	Gliner, et al.	607	116
	43	2004/0077921 A1	04/22/04	Becker, et al.	600	9
	44	2004/0010177 A1	01/15/04	Rohan, et al.	600	9
	45	5,299,569	04/05/94	Wernicke, et al.	607	45
3	46	5,707,334	01/13/98	Young	600	9
	47	5,725,471	03/10/98	Davey, et al.	600	13
	48	6,086,525	07/11/00	Davey, et al.	600	13
	49	6,132,361	10/17/00	Epstein, et al.	600	13
	50	6,491,620 B1	12/10/02	Davey	600	9
	51	6,503,187 B1	01/07/03	Ilmoniemi, et al.	600	14
	52	6,527,695 B1	03/04/03	Davey, et al.	600	13

## FOREIGN PATENT DOCUMENTS

Examiner				Tran	Translation	
Initial	Document No.	Date	Country	YES	NO	
		<u> </u>				
EXAMINER			DATE CONSIDER	ED		